| Inde | ex of C | laims |  |
|------|---------|-------|--|
|      |         |       |  |

| Application/Control N | ١o. |
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10/510,451

Date

HEINRICH, RUSSELL

Applicant(s)/Patent under Reexamination

Art Unit

Examiner

Michael G. Mendoza

3734

| √ | Rejected |
|---|----------|
| = | Allowed  |

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Claim

Restricted

| N | Non-Elected  |
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| _ | Interference |

| A | Appeal   |
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| CI                   | aim  | Date     |                |  |          |  |              |          | _            |          |
|----------------------|--|----------|----------------|--|----------|--|--------------|----------|--------------|----------|
| Final                | Original   |          |                |  |          |  |              |          |              |          |
| 1 2 3 4              | 1 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 335 36 37 38 39 39 39 39 39 39 39 39 39 39 39 39 39 |          |                |  |          |  |              |          |              |          |
| 2                    | 2  | Ш        |                |  |          | _  | _            | _        |              |          |
| 3                    | 3  | Ш        | $\rightarrow$  |  | _        |  |              | _        |              |          |
| 4_                   | 4  | Н        | _              |  |          | $\dashv$   | _            | $\dashv$ | -            |          |
|                      | <del>  P</del>   | Н        |                |  | _        | $\dashv$   | _            |          | $\dashv$     |          |
| ĺø                   | 10   | $\vdash$ | $\dashv$       |  |          |  |              |          | $\dashv$     |          |
| 12                   | /<br>  R   | Н        | $\vdash$       | $\dashv$   |          | -  | -            |          | $\dashv$     |          |
| $\vdash$             | + %  | Н        | H              | $\dashv$   | -        | $\dashv$   | _            | -        | $\dashv$     |          |
| $\vdash$             | 10   |          | $\vdash$       | $\dashv$   |          |  | _            |          | $\dashv$     |          |
| $\vdash \vdash$      | 11   |          |                |  |          |  | _            |          |              |          |
| $\vdash \vdash$      | 12   | П        | $\vdash$       |  |          |  |              |          |              |          |
| <del>    .</del>     | 13   | П        |                | $\neg$   |          | $\vdash$   |              |          |              |          |
| ├ <b></b>            | 14   | П        | П              |  |          |  |              |          |              |          |
| $\sqcap$             | 15   |          |                |  |          |  |              |          |              |          |
| $\sqcap$             | 16   |          |                |  |          |  |              |          |              |          |
| П                    | 17   | Г        | П              |  |          |  |              |          |              |          |
| $\Box$               | 18   | Γ        |                |  |          |  |              |          |              |          |
| П                    | 19   |          |                |  |          |  |              |          |              |          |
| П                    | 20   |          |                |  |          |  |              |          |              |          |
|                      | 21   |          |                |  |          |  |              |          |              |          |
| $\Box$               | 22   | <u> </u> |                |  |          |  |              |          | Ш            |          |
| L                    | 23   | _        |                | _  | _        |  | L            | _        | Ш            |          |
| $\sqcup$             | 24   | _        | _              |  |          |  |              | _        |              |          |
| $\vdash$             | 25   | ₩        | <u> </u>       |  |          | _  |              | _        | $\vdash$     |          |
| $\vdash$             | 26   |          | $\vdash$       |  |          | $\vdash$   |              | -        |              |          |
| H                    | 27   |          | Н              | -  |          | H  | _            | _        |              |          |
| H                    | 28   | _        | -              | $\vdash$   | _        | -  | ⊢            |          |              |          |
| H.                   | 29   | ╁        | -              | -  | _        | -  | $\vdash$     |          |              | _        |
| 30                   | 30   | ₩        | ┝              | $\vdash$   | -        | <del>                                     </del> | ┝            | ├        | -            | _        |
| 30                   | 30   | ┼        | $\vdash$       | -  | -        | $\vdash$   | ├─           | ┢─       |              | _        |
| -                    | 3/2  | ┼-       | H              |  | -        | $\vdash$   | ┝            |          | -            | _        |
|                      | 34   | +-       | $\vdash$       | <del>                                     </del> | $\vdash$ | Г  | $\vdash$     | t        |              | _        |
|                      | 36   | T        |                | Г  | Г        | $\vdash$   |              | T        | П            |          |
|                      | 36   | $\top$   |                |  | Г        | Γ  |              | l        |              |          |
|                      | 37   |          | Г              |  |          | Г  |              |          |              |          |
|                      | 38   |          |                |  |          | L  |              |          |              |          |
|                      | 39   |          |                |  |          |  |              |          |              |          |
|                      | 40   |          |                |  |          |  |              |          |              |          |
|                      | 41   |          | <u> </u>       | L  | <u> </u> | _  |              |          | <u>_</u>     | L        |
|                      | 42   |          | <u> </u>       |  | L        | _  | $oxed{oxed}$ |          |              | <u> </u> |
| <u> </u>             | 40<br>41<br>42<br>43<br>44<br>45<br>46   | ↓_       | <u> </u>       | <u> </u>   | _        | <u> </u>   | $\vdash$     | <u> </u> | <u> </u>     | <u> </u> |
|                      | 44   | <b>Ļ</b> |                | _  | _        | L_   | <u> </u>     | ⊢        | <u> </u>     | _        |
|                      | 45   | ╄-       | -              | ⊢  | _        | ⊢  | ₩.           | ⊢        | ├-           | $\vdash$ |
| -                    | 46   | 4        | ├              | <b>L</b>   |          | -  | ⊢            | ├        | ├            | ├-       |
| 31<br>32<br>33<br>34 | 47   | ┼        | <del> </del> − | ├-   | $\vdash$ | ├-   | -            | $\vdash$ | <del> </del> | -        |
| 33                   | 48<br>49   | +-       |                | ├  | Ͱ        | $\vdash$   | $\vdash$     | $\vdash$ | ┢            | $\vdash$ |
| 27                   | 50   | ╁        | ╁              | ├  | ├-       | ╁  | $\vdash$     | $\vdash$ | -            | $\vdash$ |
| 124                  | JOU  | 1_       | 1              | I  | 1        | L_   | 11           | 1        | 1            | 1        |

|   | 100      | Billa | Original   |          |          |           |          |                |          |                |  |          |
|---|----------|-------|--|----------|----------|-----------|----------|----------------|----------|----------------|--|----------|
|   |          | - [   | - 1  |          |          |           |          | Ŀ              |          |                |  |          |
| [ | 3        | 5     | 51<br>52<br>53<br>54<br>55<br>56<br>57<br>58<br>59<br>60                                     |          |          |           |          |                | Ш        |                |  |          |
| 1 |          |       | 52   |          |          |           |          |                |          |                |  |          |
| ļ |          |       | <b>5</b> 3   |          |          | L         |          |                |          |                |  |          |
| ļ |          |       | 54   |          |          | <u>_</u>  |          | lacksquare     |          |                |  | _        |
| ١ | 3        | 6     | 55   |          |          | _         |          |                |          |                |  | _        |
| ļ | _        | Ш     | 56   |          |          |           | _        | _              | _        |                |  |          |
|   |          | Ш     | 57   |          |          |           |          | <u> </u>       | <u> </u> |                |  |          |
| ١ |          | Ц     | 58   |          |          |           |          | ļ              | <u> </u> |                |  |          |
|   |          | Ш     | 59   |          | _        |           | _        | <u> </u>       | _        |                | _  |          |
| 1 | _        | Ш     | 60   |          |          |           | <u> </u> | <u> </u>       | ļ        |                |  | _        |
|   |          | Ш     | 61   |          |          | <u> </u>  | <u> </u> | <u> </u>       |          | _              | _  | _        |
|   |          |       | 62   |          |          | <u> </u>  | <u> </u> | _              |          | _              | L  | _        |
|   | _        | Ш     | 63   |          | _        | _         |          | _              | _        | <u> </u>       | _  | _        |
|   | Ц        | Щ     | 64   |          | ļ        | <u> </u>  | <u> </u> | <del> </del> — | <u> </u> | <u> </u>       | -  | <u> </u> |
|   | _\       | 1     | 65   |          |          | L         | _        | <u> </u>       | <u> </u> | <u> </u>       | <u> </u>   | <u> </u> |
|   | 4        | 11    | 66   |          | <u> </u> | _         | <u> </u> | <u> </u>       | ⊢-       | $\vdash$       | Ŀ  | <u> </u> |
| ļ | <u> </u> |       | 67   | _        | <u> </u> | <u> </u>  | <u> </u> | <u> </u>       | _        | L              | <u> </u>   | <u> </u> |
| ١ |          |       | 61<br>62<br>63<br>64<br>65<br>66<br>67<br>70<br>71<br>72<br>73<br>74<br>75<br>76<br>77<br>78 | L        | L-       | <u> </u>  | <u> </u> |                | <u> </u> | <u> </u>       | ┡  | <u> </u> |
| 1 |          |       | 69   |          | L        |           | _        | L              |          | <u> </u>       |  |          |
|   |          |       | 70   |          |          |           |          | L              | ╙        | <u> </u>       |  |          |
|   | L        |       | 71   |          |          | L         |          | L              |          |                | L.   | _        |
|   | L        |       | 72   | L        |          | L         | <u> </u> | <u> </u>       | <u> </u> | _              | <u> </u>   | _        |
|   | _        |       | 7B_  | L        | <u> </u> | L         | _        | <u> </u>       | <u> </u> |                | <u> </u>   | _        |
|   | Ļ        |       | 7#   | <u> </u> |          | <u> </u>  | _        | ļ              | ļ        |                |  | _        |
|   | 3        | )     | 75   |          |          | <u> </u>  | _        | _              | <u> </u> | <u> </u>       |  | -        |
|   | _        |       | 76_  | <u> </u> |          | <u> </u>  | _        | <u> </u>       | <u> </u> |                | <u> </u>   | _        |
|   | _        |       | 77   | <u> </u> | <u> </u> | ├         |          |                | ├-       | <u> </u>       | ├-   | ⊢        |
|   | <u> </u> |       | 78   |          |          | ├         | ⊢        | ⊢              | ├        | -              | -  | ⊢        |
| į | _        |       | 79   |          | _        | -         | ⊢        | 1              | ⊢        | ⊢              | ├-   |          |
|   | L        |       | 80   | _        |          | -         | _        | ⊢              | -        | _              | -  | -        |
|   | <u> </u> |       | 80<br>81<br>82   | $\vdash$ | -        | ├         | -        | -              | ├        | ├              | $\vdash$   | ├-       |
|   | $\vdash$ |       | 82   | ⊢        | ├-       | -         | $\vdash$ | -              | $\vdash$ | ⊢              | ⊢  |          |
|   | L        |       | 83   | $\vdash$ | -        | -         | $\vdash$ | -              | $\vdash$ | <del> </del>   | $\vdash$   | -        |
|   | $\vdash$ |       | 83<br>84<br>85   | ├        | $\vdash$ | <b></b> - | $\vdash$ | $\vdash$       | $\vdash$ | $\vdash$       |  | ╁        |
|   | ⊢        |       | 00   |          | $\vdash$ | ┼         | ╀        | ╁              | +        | ⊢              | -  | ╁┈       |
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|   | ├-       |       | 86<br>87<br>88   | $\vdash$ | ┢        | ┼         | $\vdash$ | $\vdash$       | $\vdash$ | <del>  -</del> | <del>                                     </del> | $\vdash$ |
|   | -        |       | 90   | -        | -        | +-        | -        | -              | +-       | $\vdash$       | +  | ┢        |
|   | ├-       |       | 89<br>90   | ├        | $\vdash$ | ┼         | -        | $\vdash$       | +        | $\vdash$       | ╁─   | $\vdash$ |
|   | $\vdash$ |       | 91   | $\vdash$ | $\vdash$ | ┼─        | +-       | $\vdash$       | $\vdash$ | $\vdash$       | ╁╌   | $\vdash$ |
|   | $\vdash$ |       |  | $\vdash$ | ┢─       | +         | $\vdash$ | 1-             | +        | $\vdash$       | $\vdash$   | $\vdash$ |
|   | ⊣        |       | 92<br>93   | ├-       | ⊢        | +-        | ╁        | ╁              | ╁        | ╁╌             | +  | $\vdash$ |
|   | -        |       | 94   | ╁┈       | ╁        | +-        | ╁        | +              | ╁        | +              | $\vdash$   | $\vdash$ |
|   | $\vdash$ | -     | 95   | $\vdash$ | ├-       | +         | ╁╴       | +              | +        | +              | 1  | 1        |
|   | $\vdash$ |       | 96   | +        | ╁╴       | +-        | $\vdash$ | +-             | +        | +              | $\vdash$   | t        |
|   | $\vdash$ |       | 97   | $\vdash$ | $\vdash$ | +         | ╁        | +              | +        | +              | ✝  | t        |
|   | $\vdash$ |       | 98   | +-       | $\vdash$ | +-        | +        | +              | +-       | +              | $\vdash$   | +        |
|   | $\vdash$ |       | 99   | 1        | $\vdash$ | +-        | +-       | +              | +-       | †              | $\vdash$   | T        |
|   | $\vdash$ |       | 100  | $\vdash$ | +-       | +         | +-       | +              | +-       | +              | $\vdash$   | T        |
|   | ᆫ        |       | 1,00   |          | 1        | ٠         | 1        |                |          |                | Щ  | _        |

| Cla          |   |  |          |  | Date  | ;                                      |  |              |              |                 |
|--------------|---|--|----------|--|---|--|--|--------------|--------------|-----------------|
|              | _   |  |          |  |   |  |  |              |              |                 |
| ਕ            | Original  |  |          |  |   |  |  |              |              |                 |
| Final        | įĝ  |  |          |  |   |  |  |              |              |                 |
| _            | Õ   |  |          |  |   |  |  |              |              |                 |
|              | 101   |  | -        | -  |   |  | -  |              | _            | $\dashv$        |
|              | 101   | _  | -        | -  |   |  |  |              | $\vdash$     | ᅱ               |
|              | 102   |  |          | $\vdash$   | -   | _                                      |  |              |              | ᅱ               |
|              | 101<br>102<br>103<br>104<br>105<br>106  |  | -        | $\vdash$   | _   | _                                      |  |              | _            | $\dashv$        |
|              | 104   | _  | _        | _  | _   | $\vdash$                               | _  |              |              | $\dashv$        |
|              | 105   |  | _        | _  | _   | Н                                      | _  |              |              | $\dashv$        |
|              | 106   |  | _        |  | _   | <u> </u>                               | _  |              |              | $\dashv$        |
|              | 107   |  |          |  |   | _                                      |  | _            | _            |                 |
|              | 108<br>109<br>110   |  |          | _  | _   | _                                      | _  |              |              | _               |
|              | 109   |  |          | <u> </u>   |   | <u> </u>                               |  |              | _            |                 |
|              | 110   |  | L.       |  |   |  |  |              |              |                 |
|              | 111   |  |          | _  |   |  | _  |              |              | _               |
|              | 112   | <u> </u>   |          | L  | $ldsymbol{le}}}}}}$ | <u></u>                                | L  | L.           |              |                 |
|              | 113   | L  | L        | L  |   |  |  |              | $oxed{oxed}$ |                 |
|              | 114   |  |          |  |   |  |  |              |              |                 |
|              | 115   |  |          |  |   |  |  | Ĺ            |              |                 |
|              | 111<br>112<br>113<br>114<br>115<br>116<br>117<br>118<br>119<br>120<br>121<br>122<br>123<br>124<br>125<br>126<br>127 |  |          |  |   |  |  |              |              |                 |
|              | 117   |  |          | Π  |   |  |  |              |              |                 |
|              | 118   |  |          |  |   |  |  |              |              |                 |
| <del></del>  | 119   |  | _        |  |   |  | <del>                                     </del> |              |              | П               |
|              | 120   |  | _        | $\vdash$   | Г   | $\vdash$                               |  |              |              |                 |
|              | 121   | ┢  | $\vdash$ | <del>                                     </del> | $\vdash$  | ┢                                      | $\vdash$   |              |              | П               |
| <del></del>  | 122   | -  | $\vdash$ | ╁╴   |   | ┢                                      | -  | Н            |              | $\Box$          |
|              | 123   | -  | ┝        | ╁  |   | $\vdash$                               | $\vdash$   | $\vdash$     | _            |                 |
|              | 124   |  | -        | ╁╌   |   |  | -  | $\vdash$     |              | Н               |
|              | 125   |  |          | -  | -   | -                                      | ┢  | $\vdash$     | ├─           | H               |
| <u> </u>     | 125   | $\vdash$   | -        | -  | -   | ┢                                      | -  | -            |              | Н               |
| ├            | 120   | -  | -        | -  | ├   | $\vdash$                               | ├  | ┢            | -            | $\vdash$        |
| <u> </u>     | 127   |  | ├        | ┢╌   | -   | <del> </del>                           | -  | $\vdash$     | ⊢            | $\vdash$        |
| <u> </u>     | 128<br>129<br>130<br>131<br>132   | ⊢  |          | $\vdash$   | ⊢   | ├                                      |  | -            | ╁            | Н               |
| <b>├</b> ─   | 129   | <u> </u>   | ⊢        | ⊢  | ├-  | <del> </del>                           |  | ├—           | ⊢            | Н               |
|              | 130   | -  | ├        | ⊢  | ├-  | ⊢                                      |  | -            | ┢            | $\vdash$        |
|              | 131   | _  | ┡        | ╄  | <u> </u>  | ┞-                                     |  | -            | ├            | $\vdash \vdash$ |
|              | 132   | _  | <u> </u> | -  | <u> </u>  | -                                      | ļ  |              | ├            | $\vdash$        |
|              | 133<br>134  | $\vdash$   | <u> </u> | <del> </del>                                     | <u> </u>  | Ь-                                     | <del> </del>                                     | <u> </u>     | -            | H               |
| <u> </u>     | 134   | <u> </u>   | <b>L</b> | ــــ   | ↓_  | <b> </b>                               | $\vdash$   | ⊢            |              | Н               |
|              | 135   | <u></u>  | <u> </u> | 1  | <u> </u>  | <b> </b>                               | <u> </u>   | <u> </u>     | <del> </del> | Ш               |
|              | 136<br>·137   | $oxed{oxed}$                                     | <u> </u> | 1  | _   | ــــــــــــــــــــــــــــــــــــــ |  | <u> </u>     | <u> </u>     | Щ               |
| <u> </u>     | 137   | <u> </u>   | <u> </u> | ↓_   | ـــــ   | _                                      | <u> </u>   | <u> </u>     | <u> </u>     | Щ               |
|              | 138   | <u></u>  |          | L  | <u> </u>  | _                                      | <u> </u>   | $oxed{oxed}$ | _            |                 |
|              | 139   | L  |          |  |   | L                                      | <u>L</u>   | L            | Ŀ            |                 |
|              | 140   | Ĺ  |          | L  |   | L                                      |  |              | L            | $oxed{\Box}$    |
|              | 141   | L  | L        | Ĺ  |   |  |  | L            | L            |                 |
|              | 142   |  |          |  |   |  |  | $L^{-}$      | Ĺ            |                 |
|              | 143   |  |          | $\top$   |   |  | Ι.   |              | Г            |                 |
|              | 144   |  | 1        | 1  | T   | 1                                      |  |              |              |                 |
| <b>—</b>     | 145   | f  | 1        | 1  | T   | †                                      | 1  | †            | 1            |                 |
|              | 146   | $\vdash$   | T        | T  | †   | †                                      | 1  | T            | T            | Г               |
| $\vdash$     | 147   | 1  | T        | T  | T   | +-                                     | 1  | +            | t            |                 |
| <del> </del> | 148   | <del>                                     </del> | +        | +  | +   | +                                      | +-   | $\vdash$     | +-           | t               |
| ├            | 149   | ╁  | +        | +-   | +-  | +                                      | +  | +            | +            | ╁╴              |
| -            | 150   | $\vdash$   | $\vdash$ | ╁  | $\vdash$  | ╁╌                                     | ╁  | ╁            | $\vdash$     | +               |
| <u> </u>     | 1 100   | <u>L.</u>  | 1        | 1  | 1   | Ц.                                     | _  | 1            | 1            |                 |